

# Failed intraarticular implant revised with Catamaran™ SI Joint Fusion System

Mark Stouffer, MD—St. George Orthopedic Spine, St. George, UT

## Patient History

The patient is a 67-year-old female with long-standing low back pain on her right side. She was seen and evaluated at another clinic and diagnosed with sacroiliitis of the right sacroiliac (SI) joint. She was identified as a candidate for right SI joint surgery and underwent a fixation procedure using a dowel made of human cortical bone (SiLO, Aurora Spine). She reported approximately one month of relief before her pain returned with increasing intensity. Her pain was then exacerbated by a fall. She was treated nonoperatively, including physical therapy and injection of the right SI joint, but without relief. She was then referred to me.

## Patient Examination and Diagnosis

On physical examination, the patient demonstrated positive Fortin Finger sign with tenderness to palpation at the site, positive FABER's exam of the right SI joint, positive right thigh thrust exam, and positive compression of the right SI joint. These results, combined with the patient's history of right-side low back pain that worsened with change in position from sitting to standing, and difficulty sleeping indicated that the right SI joint was the source of her pain. Repeat diagnostic injection of the right SI joint gave 100% relief for the first 90 minutes, confirming the right SI joint as the pain generator.

### CT SCANS (Figure 1A and 1B) DEMONSTRATE RADIOLUCENCY AROUND THE BONE DOWEL.

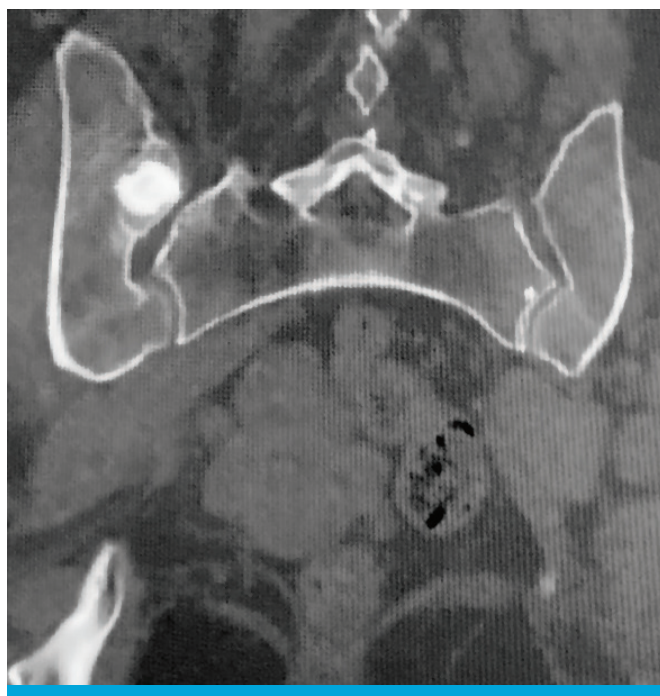


Figure 1A.

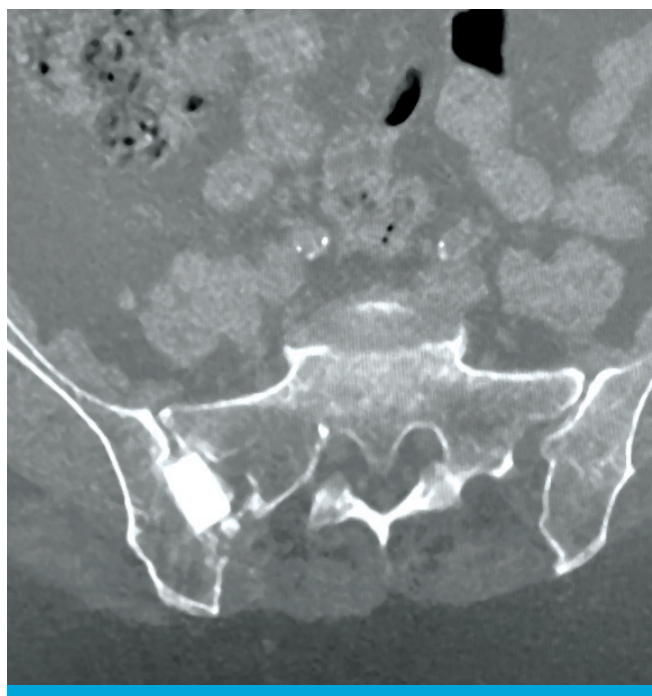


Figure 1B.

Preoperative CT scans demonstrating radiolucency around the bone dowel sclerotic bone.

## Treatment Plan

The patient was presented with potential treatment options, including nonoperative and revision SI joint fusion surgery using the Catamaran Fixation Device. The goal of the surgery was discussed, including the potential risks and benefits. The patient elected revision SI joint fusion surgery.

## SI Joint Transfixed via an Inferior-Posterior Approach

In the operating room, the patient was placed in the prone position. The SI joint was transfixed utilizing an Inferior-Posterior surgical technique. This approach allows the Catamaran Fixation Device to be placed into the dense cortical bone of the SI joint, avoiding the variable dorsal recess. Utilizing a 2D fluoro imaging sequence, the Catamaran Fixation Device was implanted with one pontoon fixated into the ilium and the other into the sacrum transfixing and stabilizing the SI joint along its longitudinal axis. The Catamaran Fixation Device was successfully placed without difficulty as confirmed by intraoperative fluoro.

## Postoperative Care

The patient was restricted to partial weightbearing of the right lower extremity for the first two weeks postoperative. She was then cleared for full weightbearing as tolerated. For the first six weeks postoperative, her activity was restricted to limited bending and twisting, and from lifting anything heavier than 10 pounds. At six weeks postoperative, she was released from all activity restrictions and was cleared to gradually resume her regular activities as tolerated. No postoperative complications were reported and the patient continues to improve. At ten weeks postoperative, she reports she is doing well and is essentially pain-free in her right SI joint. Postoperative imaging shows that the implant is stable and in good position (Figures 2A and 2B).

The Catamaran SI Joint Fusion System is intended for sacroiliac joint fusion for conditions including sacroiliac joint disruptions and degenerative sacroiliitis.



104 Cooper Court  
Los Gatos, CA 95032  
[www.tenonmed.com](http://www.tenonmed.com)

## X-RAYS AT 10 WEEKS POSTOPERATIVE



Figure 2A.

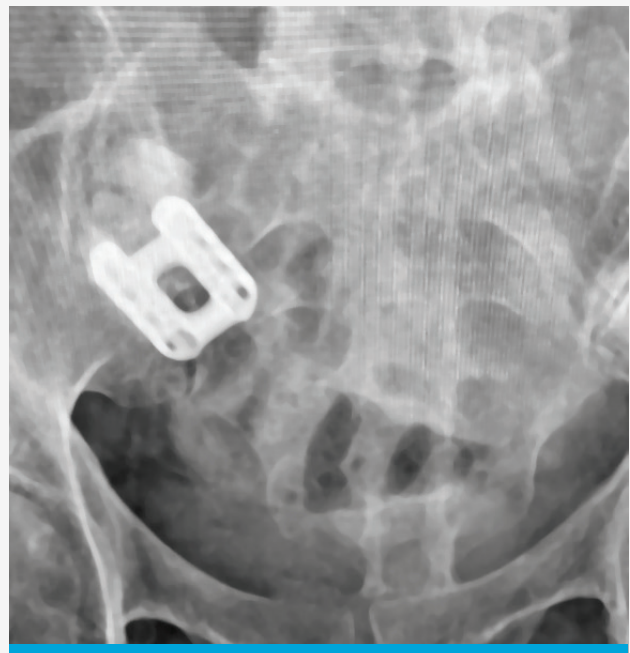


Figure 2B.

### Figures 2A and 2B

X-rays taken 10 weeks postoperative showing the SI joint transfixed in the inlet (2A) and outlet (2B) views.